

combined with small amounts of mapharsen and bismuth. It rather seems that in the five-week system it was an unfortunate hazard that the only case of severe toxic reaction was a fatality and therefore it was felt that the continuation of this method of therapy was justifiable.

#### SUMMARY

1. This is a preliminary report on 201 cases of early syphilis treated by a five-week penicillin-mapharsen-bismuth schedule.

2. Of 230 patients who started on this schedule, 96% received the complete treatment. Twenty-nine were not considered in this study mainly because they were not definitely cases of early syphilis.

3. It has been possible to keep under observation for 6 or more months 79% of the patients treated prior to May, 1947.

4. There was one fatality due to encephalopathy (0.4%) and there were no other severe toxic reactions.

5. Satisfactory progress was obtained in 100% of 36 cases of seronegative primary syphilis, in 90% of 55 cases of seropositive primary syphilis, and in 86% of 94 cases of secondary syphilis.

6. The overall results show 90% of satisfactory progress and 4.5% of definite treatment failures, with the other 6% pending. If results obtained so far are maintained, the five-week schedule will compare favourably with other adequate treatment methods for early syphilis.

#### REFERENCES

- MARIN, A. AND LAMBERT, A.: *Canad. M. A. J.*, 51: 265, 1944.
- GOLDBLATT, S.: *Arch. Dermat. & Syph.*, 49: 403, 1944.
- STERNBERG, T. H. AND LEIFER, W.: *J. Am. M. Ass.*, 135: 1, 1947.
- PILLSBURY, D. M. AND LOVEMAN, A. B.: *Am. J. Syph., Gonorr. & Ven. Dis.*, 31: 115, 1947.
- HELLER, J. R. Jr.: *J. Am. M. Ass.*, 132: 258, 1946.

#### RÉSUMÉ

Rapport préliminaire des résultats obtenus chez 201 malades atteints de syphilis précoce et traités par l'association P.M.B. en séries conjuguées pendant 5 semaines. Sur 230 malades inscrits au début, 90% reçurent le traitement complet. 29 ont été rayés de la série parce qu'ils ne répondaient pas exactement à la définition de syphilis précoce. 76% des malades traités avant mai 1947 ont été suivis pendant 6 mois et davantage. On n'a relevé qu'une seule mortalité, par encéphalite, soit 0.4% du total. Par ailleurs on ne nota aucune réaction sérieuse.

Des résultats excellents ont été relevés dans 100% des 36 cas de syphilis primaire séro-négative, dans 90% des 55 cas de syphilis primaire séro-positif, et dans 86% des 94 cas de syphilis secondaire. Dans l'ensemble 90% ont eu des résultats satisfaisants et 4.5% furent des échecs; 6% ne sont pas classés définitivement. Si les résultats obtenus persistent, ce traitement de 5 semaines supportera avantageusement la comparaison avec tout autre mode de traitement de la syphilis précoce.

JEAN SAUCIER

## THE PROBLEM OF THE OLDER AGE HERNIA

Hervey L. Jackes, M.D.,  
H. Rocke Robertson, M.D. and  
W. H. Sutherland, M.D.

*Shaughnessy Hospital, Vancouver, B.C.*

IN a recent summary and subsequent survey of 522 herniotomies of all types representing the surgical repairs done on the Surgical Service of Shaughnessy Hospital during the period from October 1, 1945 to September 30, 1947, an effort was made to break down and tabulate the results in a variety of ways. In so doing, some interesting figures presented themselves in respect to the various age groups. We immediately became interested in the older age group, namely 60 years and older, and of the total number of 552, it was noted that 50 came into this age group, a percentage of 9.05.

The youngest was naturally 60, the oldest 87—giving an average age of 64.

#### Types of hernia

Indirect inguinal .....	18
Direct inguinal .....	26
Direct and indirect .....	4
Strangulated .....	1
Incarcerated .....	3
Bilateral .....	5
Recurrent .....	4
Femoral .....	2
Strangulated .....	2

#### Types of repair

Halstead .....	22
Bassini .....	19
Ferguson .....	2
McArthur .....	2
Henry .....	2
Simple ligation of sac .....	1
La Roque .....	1
Mattson .....	1

#### Suture material

Steel .....	39
Silk .....	6
Fascia .....	2
No repair .....	3

#### Ambulation started postoperatively

Shortest .....	1
Longest .....	14
Average .....	1.9

#### Postoperative days—hospital

Shortest .....	9
Longest .....	29
Average .....	14.4

#### Total postoperative treatment days

Shortest .....	10
Longest .....	55
Average .....	30.4

*Postoperative complications*

Wound infection .....	3
Mild and did not affect postoperative course.	
Spinal headache .....	1
Hæmatoma .....	1
Pulmonary .....	1
Ilio-inguinal causalgia .....	1
Recurrence .....	1

Percentage of cases showing complications 16.2

The postoperative complications in all the age groups were essentially the same. In no cases were the complications of such a nature that they in any way interfered with the ultimate postoperative course.

The various percentages in all the age groups were as follows:

Age	Percentage
19 to 29 .....	13.4
30 to 39 .....	13.6
40 to 49 .....	18.8
50 to 59 .....	20.4
60 to 69 .....	16.2
70 to 79 .....	0
80 to .....	0

It will be seen from the above figures that the age group which contributed the greatest

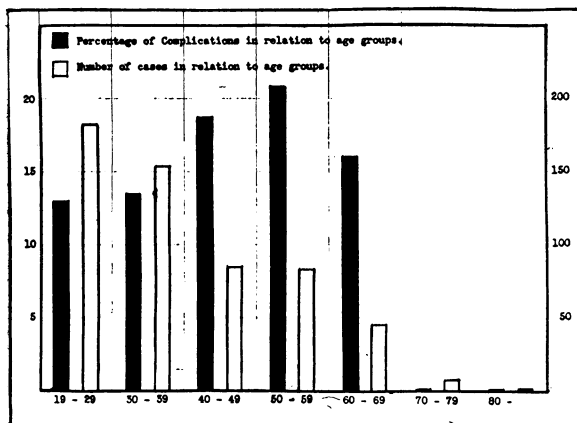


Chart 1

number of complications was 50 to 59; also that the older age group complications compare very favourably with those in the younger age groups.

Until quite recently this old age group presented a very contentious problem. We believe it to be true that most surgeons, except in cases of strangulation and incarceration, considered it ill advised surgery to subject their patients in the old age group to surgical repair of hernia. It is quite probable that the success achieved in surgery upon these emergency types of cases convinced us that possibly the risk of surgery in the older age group was not as great as had

been thought. A survey of the literature over the past 8 years, reveals that in spite of the volumes that have been written on hernia only one article dealing with this aspect of the subject was found.

F. Merke<sup>1</sup> makes the following interesting observations: (1) That in any given locality, the population is having an increased life expectancy. In Basle in 1900—7,125 were over the age of 60. In 1940 the number was 14,222. Hence he suggests that the incidence of surgery in this age group is increasing and that in St. Clara Hospital, Basle, the percentage of surgery in this age group rose from 9.4 to 13.2% between 1929 and 1941. (2) In a series of 102 simple hernia, there was one death—10 days postoperative from gastro-intestinal hæmorrhage with a diagnosis of mesenteric thrombosis. (3) In a series of 53 cases operated upon for strangulated hernia the mortality was 11.3%. He suggests that as a certain number of hernias with frequent incarcerations are almost certain to become strangulated, it is advisable to resort to early surgery. (4) He stresses the necessity for adequate preoperative preparation and postoperative treatment. He advises early ambulation and suggests either spinal or local anaesthesia.

Finally he makes a plea that the general practitioner should be acquainted with the fact that with present day methods, these cases of repeated incarcerations can now be treated surgically with very little more risk than the younger age groups.

In the past, the older age group were not considered surgical risks for a variety of reasons. (1) The tissues were not considered good material for a satisfactory repair. It was considered that the incidence of recurrence would be high. (2) This group often has associated peripheral vascular disease and the possibility of a resultant thrombophlebitis with embolic complications was deemed a contraindication of surgery. (3) Many are subject to chronic pulmonary conditions which might be aggravated by surgery with resultant strain from coughing and recurrence of the hernia. (4) This group often has associated genito-urinary complications and it has been suggested that recurrence can be caused by the added strain of prostatic disease.

Yet in spite of these objections, the pendulum has undoubtedly swung in the opposite direction and now because of the various procedures, which will be discussed later, we are able to

undertake surgery in this age group with very little more risk than in the younger age groups and as our figures show the risk incidence of complications and recurrence is no greater; in fact it is less than in some of the other age groups. We have adopted the following criteria as to the operability of these cases. Surgical repair of the hernia in patients in this age group is considered in those: (1) who appear to be in good general physical condition — particularly those who look younger than their stated age; (2) who are productive as far as earning capacity and ability to work are concerned; (3) whose ability to work is handicapped by the necessity of a truss which in some cases will not satisfactorily retain the hernia and in some cases peculiar to our service, namely, the amputation cases, interferes with the apparatus associated with the prosthesis.

In cases where the patient leads a sedentary life, is not required to do heavy manual work and in which the hernia can be retained with a suitable truss, there is no indication to resort to surgery. It is interesting to note that the medical officer in charge of our convalescent hospital at Burnaby, stated that of all patients under him, the most grateful are the old age group herniotomies.

The most common preoperative complications are those concerned with the respiratory tract. If the patient has a chronic cough, as many of the old age group have, adequate measures are instituted to combat any existing condition. In the older age group, the chest condition is a chronic one and we feel that as the condition cannot be completely eliminated, it is better to institute a regimen of treatment which will control the existing condition. To this end, we institute a course of preventive treatment with aerosol penicillin; aminophyllin; ephedrine; penicillin. It is impossible to outline a definite course of treatment, as each case has to be treated on its individual merits. In general, however, our plan is as follows.

Preoperatively we put our patients on an expectorant mixture using potassium iodide. We use aerosol penicillin with an oxygen tank, the apparatus being beside the bed and is used periodically during the waking hours. Aminophyllin gr. 3 t.i.d. Ephedrine gr.  $\frac{3}{8}$  t.i.d. We believe aminophyllin to be more satisfactory and much safer as a vasodilator in the older age group. CO<sub>2</sub> inhalation postoperative is also of great

benefit; we use it only for a period of 24 hours. Postoperative breathing exercises and early ambulation are, of course, part of the regimen. Penicillin 50,000 units q.3 h. for 48 hours postoperative is given.

Under this regimen it is very gratifying to observe how these cases can tolerate surgery with little, if any, increase in pre-existing symptoms. If there is any indication of cardiac complications, a thorough examination, including electrocardiographic investigation is carried out.

A routine examination of the prostate and urinalysis is carried out and in our series it was found that: 8 complained of nocturia; 2 had positive urinary findings, *i.e.*, sugar, albumen, casts; 8 prostatic enlargement; 7 referred to genito-urinary — no treatment suggested; 1 nephrectomy; 1 prostatectomy; 1 transurethral; 30 normal urinalyses.

Peripheral vascular conditions are often present and can become a frequent complication in the old age group, a recurrence of an old thrombophlebitis or an initial episode in a pre-existing varicose condition. We believe this is best handled by two methods: (a) Early ambulation. This is perhaps the greatest advance in our handling of these cases and has done more to make surgery safe than any other one factor. It stimulates circulation and aids respiration and generally has a preventive beneficial effect in limiting postoperative complications. (b) Stir up regimen. By this we mean a definite regimen carried out by trained physiotherapists who take charge of the case preoperatively and instruct the patient in breathing as well as in muscular exercises, to the end that on their return from the operating room they are able to carry out intelligently the exercises they have previously been instructed to do.

#### ANÆSTHESIA

We would be remiss not to give all due credit to the part our anæsthetists play in this type of surgery. The recent advances and skill in their department has indeed made a valuable contribution to the success in our handling of these cases. Each case is assessed preoperatively by one of the anæsthetic staff and the best method of anæsthesia to suit the individual case is instituted.

In our series the type of anæsthésia used was as follows: spinal 42; local block 5; cyclopropane 3; cyclopropane and local 1.

We suggest the usual dietary build up, supplemented by multi-vitamins with an added course of vitamin C which is essential to wound healing and so is doubly necessary in this type of patient. A check up in our Dietary Department reveals the fact that our ordinary hospital diet contains 98 to 135 mgm. of vitamin C daily, according to the season of the year—this of course depends on just how much of this given diet the individual patient might take. However, to assure an adequate amount of this vitamin we give a daily oral dose of 200 mgm.

We instituted a follow up of our series and were able to contact 48 of the 50 cases with the following results: 47 were entirely satisfied with the operative result. The one dissatisfied case had a postoperative ilio-inguinal causalgia and is at present under treatment. There was one recurrence 14 months after operation, and one case that had a repair of a left recurrent direct inguinal who has now developed a femoral hernia on the same side. Twenty-seven have returned to work and are gainfully occupied and feel more able to carry on now that the hernia has been repaired and that they are relieved of the necessity of wearing a truss.

Since the completion of this paper we have added a further 12 cases to our operative list, 5 of which were in the 60 to 69 age group; 7 were in the 70 to 79 age group. It is of course too early to assess the ultimate outcome of these cases, but with the exception of one minor incisional infection, we have not had any other immediate postoperative complications.

#### CONCLUSIONS

We believe surgical repair of hernia in the older age group to be a sound surgical procedure under certain circumstances.

It is definitely indicated in the presence of repeated incarcerations and recurrent strangulations that have been reduced, as the operative risk is nil compared with risk of surgery in the presence of strangulation.

It permits the return to work of cases in which the hernia cannot be controlled by a proper fitting truss.

And finally, in selected cases, the operative risk in the older age groups is no greater than in the younger and the postoperative complications in our series were less than in some of the younger age groups.

#### REFERENCE

1. MERKE, F.: *Schweiz Med. Wchnscher*, April, 1943.

#### RÉSUMÉ

Lorsque les conditions sont bonnes, le traitement chirurgical de la hernie ne comporte pas de risques particuliers chez les sujets âgés. On ne doit pas hésiter à opérer de tels malades lorsque la hernie emprisonne fréquemment l'intestin et après les étranglements à répétition encore réductibles. Il faut se souvenir que le risque opératoire est moins sérieux que lorsque le chirurgien se trouve en présence d'une hernie étranglée. L'opération permet aux malades porteurs de bandages insuffisants de retourner au travail. Dans certains cas bien choisis, il arrive que les complications post-opératoires soient moins fréquentes que chez les jeunes sujets, du moins, dans la série de malades que nous avons observés.

JEAN SAUCIER

## THE PSYCHOLOGY OF RECONSTRUCTIVE SURGERY\*

J. Harold Couch, M.A., F.R.C.S.

*Toronto, Ont.*

THERE has been a marked quickening of interest in the problems and offerings of plastic surgery. This has been brought about in large measure by a heightened consciousness of the many patients who have suffered disfigurements by reason of war injuries or industrial accidents in plants running at capacity, 24 hours a day. Such interest has manifested itself in numerous articles and books which have taken the form of surveys, studies and researches to describe new operations, to ascertain the problems of this particular group of patients and their circumstances in life. It has even resulted in the creation, by governments and universities, of special boards, committees and services, to study the facilities for their improvement along medical, surgical, educational and vocational lines.

All this activity, praiseworthy as it undoubtedly is, turns out, on closer analysis, to be but an effort to deal with a physical consequence, rather than the cause of what is a particularly distressing reason for social mal-adjustment. The difficulty of the disfigured person who, by the way, is found in all walks of life, is not primarily a surgical, educational or vocational problem. If it only were, its solution would be a much simpler task than it actually is.

The real difficulty stems from the notorious lack of understanding of certain basic facts concerning the psychology of injured people. In truth, most of us are not aware that such atti-

\* Department of Surgery, University of Toronto, Toronto.